

Safer Hospitals

Analysis of building layout, crime and movement in Accident and Emergency departments.

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| CLIENT | HOME OFFICE SCIENTIFIC DEVELOPMENT BRANCH |
| LOCATION | BIRMINGHAM |
| YEAR | 2003 |

This research formed part of The Safer Hospitals initiative headed by the Police Scientific Development Branch (PSDB) of the Home Office. The aim of the research programme was to evaluate whether the risk of crime and anti-social behaviour can be reduced in healthcare buildings through the application of integrated systems emphasising the use of innovative technology.

This work was based in the Accident and Emergency Department in Birmingham Heartlands Hospital, selected due to the high levels of crime that it has faced in recent years. The project included:

- Surveys of space use and movement,
- Modelling of wayfinding,
- Analysis of natural and artificial surveillance, and
- Analysis of crime patterns

The proposals that Intelligent Space produced in conjunction with the PSDB are now being implemented by the Trust and should be complete in early 2004.

BENEFITS

The benefits for Heartlands Included:

- Mapping of crime locations
- Identification of how the locations of crimes related to the building layout, the level of natural or CCTV surveillance and the use patterns
- Identification of locations that could not be overseen either by staff or CCTV that may exhibit a high crime risk and where additional security measures may be required
- Evidence on how staff patients and visitors moved around the department and where they were generally located
- Increased privacy for patients arriving by ambulance through separation of movement streams
- Supported internal and external wayfinding to channel movement through public areas rather than past treatment rooms

The figure alongside shows the routes that people take walking through the A&E department, the areas which can be overseen by staff members (shown in blue), the locations that can be overseen by CCTV (shown in green) and the location where 58% of all crimes occur.

The location that faces these high crime rates is the most sensitive part of the A&E department, where patients requiring the use of resuscitation or who have major injuries are located. The high crime rate in this location is likely to be due to the lack of access control over entrants to the corridor and the lack of observation of the treatment rooms by staff at the base.

